

CLAIMS

What is claimed is:

1. A method for fabricating an apparatus for conditioning a polishing pad, comprising:
providing a quantity of an abrasive material that is degradable or dissolvable by at least one chemical that does not substantially degrade or dissolve a material of a polishing pad to be conditioned with the apparatus; and
forming a conditioning surface from the quantity of abrasive material, the conditioning surface including a plurality of abrasive elements.
2. The method of claim 1, comprising providing a supporting substrate.
3. The method of claim 2, wherein providing the supporting substrate comprises providing at least one of a polymer, a metal, a ceramic, paper, a paper-like material, or a fabric.
4. The method of claim 2, wherein providing the quantity of the abrasive material comprises providing abrasive particles.
5. The method of claim 4, wherein providing abrasive particles comprises providing abrasive particles having a dimension of about 25 μm to about 500 μm .
6. The method of claim 4, wherein providing abrasive particles comprises at least partially impregnating the supporting substrate with the abrasive particles.
7. The method of claim 6, wherein at least partially impregnating comprises disposing at least some of the abrasive particles adjacent the conditioning surface.

8. The method of claim 4, wherein providing abrasive particles comprises completely embedding at least some of the abrasive particles within the supporting substrate.

9. The method of claim 4, wherein forming the conditioning surface comprises securing at least some of the abrasive particles to a surface of the supporting substrate.

10. The method of claim 1, further comprising:
forming a supporting substrate from the quantity of abrasive material.

11. The method of claim 1, wherein providing the quantity of abrasive material comprises forming a layer of the abrasive material on a supporting substrate.

12. The method of claim 1, wherein forming the conditioning surface comprises patterning the abrasive material.

13. The method of claim 12, wherein patterning the abrasive material comprises:
forming a mask including apertures therethrough over the abrasive material; and
contacting regions of the abrasive material exposed through the mask to an etchant to at least partially remove the regions through the mask.

14. The method of claim 1, wherein providing the quantity of the abrasive material comprises providing a quantity of at least one of silicon dioxide, iron, an iron alloy, copper, nickel, and tungsten.

15. The method of claim 1, wherein forming the conditioning surface comprises securing filaments comprising the abrasive material to a supporting substrate.

16. The method of claim 15, wherein securing filaments comprises securing substantially linear filaments to the supporting substrate.

17. The method of claim 16, wherein securing substantially linear filaments comprises securing the substantially linear in substantially parallel relation to one another.

18. The method of claim 15, wherein securing filaments comprises securing at least one curled or twisted filament to the supporting substrate.

19. The method of claim 15, wherein securing filaments comprises forming a brush.

20. The method of claim 19, wherein securing filaments comprises securing filaments comprising a ductile material to the supporting substrate.

21. The method of claim 19, wherein securing filaments comprises securing filaments comprising at least one of iron, an iron alloy, copper, nickel, and tungsten to the supporting substrate.

22. The method of claim 15, wherein securing filaments comprises securing filaments comprising a ductile material to the supporting substrate.

23. The method of claim 15, wherein securing filaments comprises securing filaments comprising at least one of iron, an iron alloy, copper, nickel, and tungsten to the supporting substrate.